

Mammals on Roads Update

M TRACKING
Mammals
PARTNERSHIP



MAMMALS ON ROADS SURVEY

JULY 2011

Thank you to everyone who took part in *Mammals on Roads* this year and who continues to make it an extraordinary survey. This year marks the start of the survey's second decade and the last twelve months have seen the survey form part of a major assessment of the state of Britain's hedgehogs, as well as the development of a new mobile app for the survey.

Mammals on Roads began its life as the *National Hedgehog Survey* in 2001 and in its first four years, it rang alarm bells as counts of hedgehogs in England and Wales fell each year by about seven per cent. But wild populations can fluctuate from year to year, and such changes – over short periods – might not reflect long-term changes. In order to be confident of underlying trends, it is necessary to look at long datasets, over many years, and to view trends with a statistical lens.

Mammals on Roads, together with a clutch of other surveys recording mammals, was analysed in a report by the British Trust for Ornithology (BTO) for PTES and the British Hedgehog Preservation Society. The BTO's long history of bird surveys and more recently of mammal monitoring means that they are well placed to analyse data such as that collected in *Mammals on Roads*. The two graphs in figure 1 (overleaf) show changes in a 'population index' – a measure of the probability of detecting a hedgehog in a particular year compared to

that in 2001, when the survey began – for nine years of the survey. The timing of the report meant that last year's records could not be included, but they will of course be part of future analyses.

The picture that emerges from the thousands of hedgehog records collected by everyone involved is an alarming one. Two measures were looked at – one of counts of hedgehogs, and another of journeys that recorded at least one hedgehog – and both show downward trends. Over the survey period, the declines amount to decreases of 22 per cent and 15 per cent for counts and positive journeys respectively, while over the same period, the amount of traffic in Great Britain (in terms of kilometres driven) increased by about six per cent.

The report by the BTO also looked at the power of the survey to pick up population changes, to assess how useful it is as a monitoring technique for hedgehogs. Nationally, the survey could reliably detect a decline of 10 per cent over 10 years and declines of 10 per cent over 25 years in England and Scotland. In short, your efforts are the best way anyone has to monitor hedgehogs (and possibly species such as badgers and rabbits) across the countryside. Monitoring wild populations is the first step in conservation, spotting trouble when there is still time to act. Your efforts and those of volunteers in other surveys may have just saved the hedgehog.

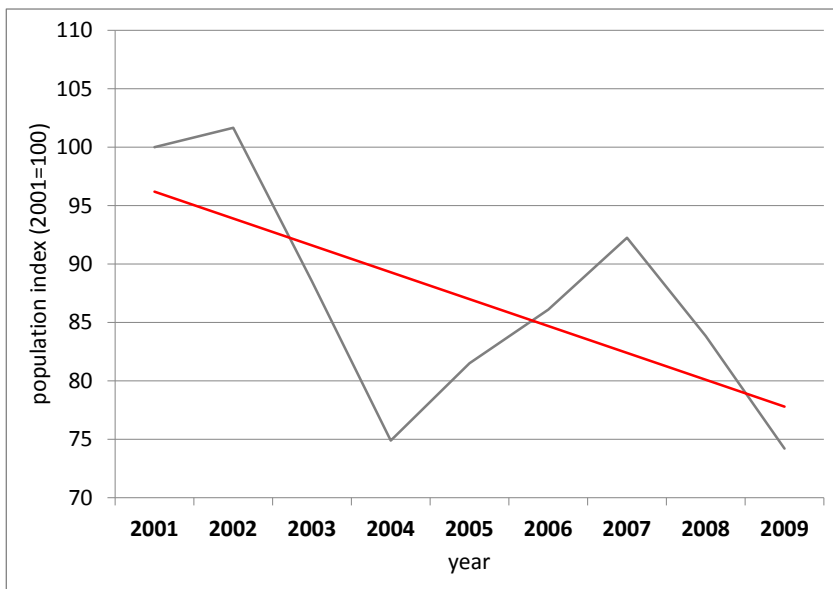
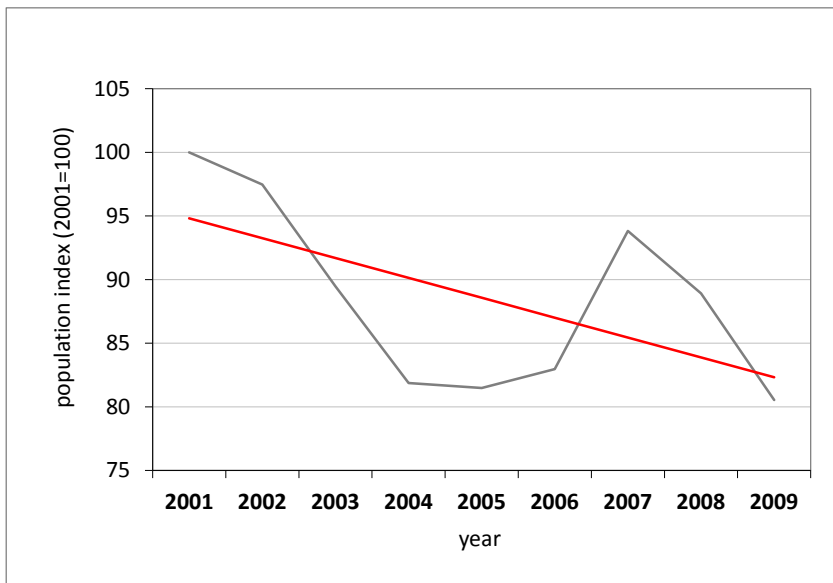


Figure 1 (left) Downward trends in the total number of hedgehogs recorded (top) and the number of journeys recording at least one hedgehog (bottom) for survey years up to 2009.

The index on the vertical axis is a measure of the probability of recording a hedgehog in any particular year compared to that in the first year of the survey. The value in 2001 is a baseline for subsequent years.



The *State of Britain's Hedgehogs* can be downloaded from our website and a fuller version of the BTO report can be requested.

Mammals on Roads is a formidable survey to complete, asking for details of both the route and of sightings, and the intention has been to put the survey online, enabling surveyors to enter and edit records more easily with interactive maps. Setting-up the technology to achieve this though has itself proved a formidable challenge and we have had some false starts. This year however the website is live – at <http://surveys.ptes.org/surveys/> – and in addition, the survey has its own iPhone app. The app records details of the route automatically using the GPS of the phone so that users just have to record the species. The data can be uploaded directly and surveyors can edit their journeys via the website just as other participants can. The app is available to download for free from the Apple Store.

Thanks to your efforts, *Mammals on Roads* has achieved a huge amount in its first decade and it is perhaps the only way to monitor mammals such as hedgehogs, badgers, rabbits and foxes nationally in the wider countryside. It has been pivotal in finding out what has been happening to hedgehogs, and with help from you and new technology can continue to lead conservation efforts.



The Tracking Mammals Partnership

There are about 60 wild mammal species in the UK and monitoring all of them is beyond the resources of any single organisation. The efforts of many of the academic groups, government agencies and NGOs involved in survey work are linked through the Tracking Mammals Partnership. At its heart are the many thousands of volunteers whose enthusiasm and experience make the work possible.

More information about mammal monitoring in the UK by government agencies and the many NGOs involved can be found at the Tracking Mammals Partnership website: www.trackingmammals.org.